

Speeding up to keep up: exploring the use of AI in the research process

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Abstract

There is a long history of the science of intelligent machines and its potential to provide scientific insights have been debated since the dawn of AI. In particular, there is renewed interest in the role of AI in research and research policy as an enabler of new methods, processes, management and evaluation which is still relatively under-explored. This empirical paper explores interviews with leading scholars on the potential impact of AI on research practice and culture through deductive, thematic analysis to show the issues affecting academics and universities today. Our interviewees identify positive and negative consequences for research and researchers with respect to collective and individual use. AI is perceived as helpful with respect to information gathering and other narrow tasks, and in support of impact and interdisciplinarity. However, using AI as a way of 'speeding up—to keep up' with bureaucratic and metricised processes, may proliferate negative aspects of academic culture in that the expansion of AI in research should assist and not replace human creativity. Research into the future role of AI in the research process needs to go further to address these challenges, and ask fundamental questions about how AI might assist in providing new tools able to question the values and principles driving institutions and research processes. We argue that to do this an explicit movement of meta-research on the role of AI in research should consider the effects for research and researcher creativity. Anticipatory approaches and engagement of diverse and critical voices at policy level and across disciplines should also be considered.